

## **REMARKS**

### **Claim Amendments**

Claims 14, 15, 18, 20, 22, 24, 30, 32 have been amended. Support for these amendments is found throughout the specification and drawings, *see, e.g.*, p. 12, lines 1-10, 17-18, and 26-28; p. 13, lines 1-4 and 8-13; Figs. 3, 4, and 6. These amendments do not introduce new matter herein.

### **§ 102 Rejections**

Claims 13-33 stand rejected under § 102(b) as being anticipated by U.S. Patent No. 4,922,114 (Boehme). Applicants request reconsideration.

Claim 13 requires "a scraping ring surrounding each sheath" and wherein "each scraping ring is mounted within a respective bearing ring." These limitations are further explained in the specification. For example, Applicants explain that a peripheral groove 74 extends along an outer perimeter of scraping ring 7 and bearing ring 41 is secured within groove 74 of each scraping ring 7. *See, e.g.*, spec, p. 12, lines 26-28. This is clearly shown in Figs. 3-5. In rejecting claim 13, the examiner alleges that Boehme's wiper assembly 36 is analogous to both the claimed scraping ring and the claimed bearing ring. Action, p. 2-3. However, if Boehme's wiper assembly 36 is deemed the claimed scraping ring, the wiper assembly 36 cannot also logically be deemed the claimed bearing ring into which the scraping ring is mounted. Further, Applicants note that nothing in Boehme describes a scraping ring mounted within a bearing ring. For example, as shown in Figs. 2-3, Boehme describes three separate rings disposed side by side - each ring having a slightly different internal diameter. For example, the first

ring 42 is secured to the second ring 48, which is secured to the third ring 54. See, Boehme, Fig. 3a. However, none of these rings is mounted within the one of the other rings. See, Boehme, Fig. 3a. Instead, these rings are merely bolted side-by-side to each other with pins 56. Thus, for at least this reason, claim 13 and its respective dependent claims are not anticipated by Boehme.

Related limitations are found in claims 23 and 30. For example, claim 23 requires "at least one bearing ring surrounding and holding the scraping ring." Claim 30 requires "securing each scraping ring within a respective bearing ring of the support structure." For reasons substantially similar to those described above, claims 23, 30, and the respective dependent claims are not anticipated by Boehme.

Claims 14 and 24 have been amended to clarify that "[each] scraping ring includes a slot extending therethrough separating a first end of the scraping ring from a second end of the scraping ring; the slot[s] [allowing] the geometry of the scraping ring to be varied." In rejecting claims 14 and 24 the examiner alleges that Boehme's hole 62 meets this limitation. However, since Boehme cites reference numeral 62 in Fig. 5 as a rod onto which a double-lobed ring holder is mounted, Applicants assume that the examiner intended to cite the opening through which the rod extends as the alleged slot. See, Boehme, col. 3, line 67 - col. 4, line 1. However, nothing in Boehme describes that this opening extends through the alleged scraping ring 36 (or rings 66, 68 shown in Fig. 5), as claimed. Instead, Boehme describes that the opening extends through a center of the ring holder - not the actual scraping ring itself, as required by the claim. Further, the opening does not separate a first end of the alleged scraping ring 36 from a second end of the alleged scraping ring 36, as claimed. Instead, each of the rings shown in Fig.

5 is a continuous circular ring having no interruptions. That is, no opening separates a first end of a scraping ring from a second end of the scraping ring. Moreover, nothing in Boehme suggests that the opening through which rod 62 extends allows the geometry of the alleged scraping ring 36 to be varied, as claimed. In the specification, Applicants describe that the claimed slot allows continuous scraping "along the entire length of the protective sheaths...regardless of the variations in the tolerances of the sheath diameters, or regardless of the degree of wear...of the scraping means." Spec, p. 7, lines 17-26. Further, as shown in Fig. 4, the slot allows the scraping ring to vary in size to accommodate varying geometries. However, the opening in Boehme is spaced apart from the actual scraping portion of the scraping ring and is not in communication with this scraping portion. Thus, the opening has no effect on the geometry of the scraping ring, as claimed. For these additional reasons, claims 14 and 24 are not anticipated by Boehme.


Claim 15 requires that "each scraping ring includes an outer peripheral groove that receives one of the bearing rings of the support structure." Similarly, claim 26 requires that "the scraping ring includes an external groove for receiving the bearing ring of the support structure." In rejecting claims 15 and 26 the examiner states that "Boehme teaches that the support structure/bearing ring is dimensioned to accommodate the wiper ring structure and its scraping wiping member." Action, p. 4. However, the examiner never points to a peripheral groove in the alleged scraping ring that receives a bearing ring. In order to properly maintain a § 102 rejection, the examiner must point to explicit or implicit teachings actually found in the cited references. Since the examiner has failed to show where the art teachings the above

limitation, the present § 102 rejection of claims 15 and 26 fail as a matter of law. Further, Applicants note that nothing in Boehme describes that the alleged scraping ring includes an outer peripheral groove that receives a bearing member, as claimed. Instead, as shown in Boehme's Fig. 3a, each ring has a smooth continuous outer perimeter without any grooves disposed therein. For these additional reasons, claims 15 and 26 are not anticipated by Boehme.

Claim 17 depends from claim 16 and requires that each scraping ring cooperates with an elastomember that includes an annular spring." In rejecting claim 17, the examiner alleges that Boehme's reference numeral 48, shown in Fig. 4a, is an annular spring. However, this is contrary to the teachings of Boehme. Rather, Boehme describes that reference numeral 48 is a wiper ring (shown as the central plate in Fig. 3a). Boehme's Fig. 4a shows a cross-sectional view of the three rings 42, 48, and 54 secured together with pin 56. Nothing in Boehme teaches any type of elastomember or annular spring that cooperates with any of the alleged scraping rings. For this additional reason, claim 17 is not anticipated by Boehme.

For the reasons described herein, Applicants submit that the present application is in condition for allowance and such action is respectfully requested.

Respectfully submitted,  
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Dated: November 2, 2009